

2 a separation channel having a cathode reservoir at one and an anode
3 reservoir at an opposite end; and

4 an injection channel having a first leg and a second leg, the first leg
5 connected at one end to a plurality of sample reservoirs and at the other end to the separation
6 channel, and the second leg connected at one end to the separation channel and at the other end
7 to a waste reservoir.

1 2. The capillary array electrophoresis plate of claim 1, wherein the first and
2 second legs of the injection channel are disposed collinear with one another.

1 3. The capillary array electrophoresis plate of claim 1, wherein the first leg
2 of the injection channel is connected at one end to a loading channel connected to the plurality
3 of sample reservoirs.

1 4. A capillary array electrophoresis plate, comprising:
2 an array of separation channels, each separation channel having a
3 cathode reservoir at one end and an anode reservoir at an opposite end; and
4 an array of injection channels, each injection channel having a first leg
5 and a second leg, the first leg connected at one end to a plurality of sample reservoirs and at the
6 other end to one of the separation channels, and the second leg connected at one end to one of
7 the separation channels and at the other end to a waste reservoir.

1 5. The capillary array electrophoresis plate of claim 4, wherein
2 the cathode reservoirs are multiplexed.

1 6. The capillary array electrophoresis plate of claim 4, wherein
2 the anode reservoirs are multiplexed.

1 7. The capillary array electrophoresis plate of claim 4, wherein
2 the waste reservoirs are multiplexed.

1 8. A method of sequentially loading a plurality of different samples onto an
2 electrophoretic separation channel, comprising:

3 providing a capillary array electrophoresis plate, comprising:
4 a separation channel having a cathode reservoir at one and an
5 anode reservoir at an opposite end; and
6 an injection channel having a first leg and a second leg, the first
7 leg connected at one end to a plurality of sample reservoirs and at the other end to the
8 separation channel, and the second leg connected at one end to the separation channel and at
9 the other end to a waste reservoir;
10 moving a first sample from a first sample reservoir through first leg of
11 the injection channel and into the separation channel; and subsequently,
12 electrophoretically separating the first sample in the separation channel;
13 and subsequently,
14 moving a second sample from a second sample reservoir through first
15 leg of the injection channel and into the separation channel; and subsequently,
16 electrophoretically separating the second sample in the separation
17 channel.

1 9. A method of sequentially loading a plurality of different samples onto an
2 electrophoretic separation channel, comprising:
3 providing a capillary array electrophoresis plate, comprising:
4 an array of separation channels, each separation channel having a
5 cathode reservoir at one end and an anode reservoir at an opposite end; and
6 an array of injection channels, each injection channel having a
7 first leg and a second leg, the first leg connected at one end to a plurality of sample reservoirs
8 and at the other end to one of the separation channels, the second legs connected at one end to
9 one of the separation channels and at the other end to a waste reservoir;
10 moving a plurality of first samples from the plurality of first sample
11 reservoirs through the plurality of first legs of the injection channels and into the plurality of
12 separation channels; and subsequently,
13 electrophoretically separating the plurality of first samples in the
14 separation channel; and subsequently,

moving a plurality of second samples from the plurality of second sample reservoirs through the plurality of first legs of the injection channels and into the plurality of separation channels; and subsequently, electrophoretically separating the plurality of second samples in the separation channel.

10. A capillary array electrophoresis plate, comprising:
a separation channel having a cathode reservoir at one and an anode reservoir at an opposite end; and
an injection channel having a first leg and a second leg, wherein,
the first leg is connected at one end to a first waste reservoir and at the other end to the separation channel, and a first plurality of sample reservoirs are connected to the first leg along the length of the first leg; and
the second leg is connected at one end to a second waste reservoir and at the other end to the separation channel, and a second plurality of sample reservoirs are connected to the second leg along the length of the second leg.

11. A method of sequentially loading four different samples onto an electrophoretic separation channel, comprising:
providing a capillary array electrophoresis plate, comprising:
a separation channel having a cathode reservoir at one and an anode reservoir at an opposite end; and
an injection channel having a first leg and a second leg, wherein,
the first leg is connected at one end to a first waste reservoir and at the other end to the separation channel and a plurality of sample reservoirs are connected to the first leg along the length of the first leg; and
the second leg is connected at one end to a second waste reservoir and at the other end to the separation channel and a plurality of sample reservoirs are connected to the second leg along the length of the second leg;
moving a first sample from a first sample reservoir through first leg of the injection channel and into the separation channel; and subsequently,

electrophoretically separating the first sample in the separation channel.

12. The method of claim 11, further comprising:

moving a second sample from a second sample reservoir through first leg of the injection channel and into the separation channel; and subsequently, electrophoretically separating the second sample in the separation channel; and subsequently.

13. The method of claim 11, further comprising:

moving a third sample from a third sample reservoir through second leg of the injection channel and into the separation channel; and subsequently, electrophoretically separating the third sample in the separation channel; and subsequently.

14. The method of claim 11, further comprising:

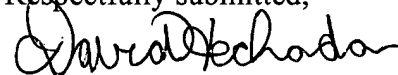
moving a fourth sample from a second sample reservoir through second leg of the injection channel and into the separation channel; and subsequently, electrophoretically separating the fourth sample in the separation channel.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



David Heckadon

(Granted Limited Recognition under 37 CFR §10.9(b) –
see enclosed Limited Recognition Document)

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